



doi:10.5281/zenodo.15372894

# Capital Market Development and Profitability of Quoted Private Sector Firms in Nigeria

Dr. Chituru Wike, Dr. Daniel Ikezam Nwonodi & Dr. Aleruchi Okocha

Department of Finance,  
Rivers State University, Port Harcourt, Nigeria

## ABSTRACT

This study examined the effect of capital market on the development of private sector in Nigeria. The objective was to examine the direction which capital market affect private sector. A cross-sectional data of 10 quoted firms was selected from 2014-2023. The study had profit after tax as the dependent variable while market capitalization, volume of transaction and number of new issues was proxy for independent variables. The Hausman test was used to validate the use of fixed effect models. The ordinary least square method was used to examine the effect of capital market on the development of private sector. R-square, regression coefficient, t-test, probability and Durbin Watson was used to determine the degree to which the independent variables affect the dependent variable. The study found that market capitalization has negative and significant effect on profit after tax of the firms while volume of transaction and number of new issues has positive and significant effect on profit after tax. From the regression summary, the study conclude that capital market have significant effect on the development of private sector in Nigeria. We recommend that management and the regulatory authorities should formulate policies that will enhance market capitalization, volume of transaction and number of new issues in Nigeria capital market.

**Keywords:** Capital Market, Development, Profitability, Private Sector Firms, Nigeria

## INTRODUCTION

The growth and development of the capital market in Nigeria can be traced to 1946 when first loan stock was floated in the country. In 1959, following the establishment of the Central Bank of Nigeria (CBN), the Federal Government of Nigeria Development Loan Stock was issued in line with its objective of fostering economic and financial development. In 1961, the Nigeria Stock Exchange was established and in 1980, the securities and exchange commission was established for the development of the capital market as a mechanism for determining prices and a channel for sourcing capital, which made it possible for businesses seeking alternative methods of financing other than loan financing to remain stable in a very tough environment while at the same time allowing the average investor the opportunity to become part owner of highly skilled or technical and often profitable enterprises that they would ordinarily not have been part of.

The Nigeria Capital Market also felt the impact of the global meltdown in 2008 because many foreign investors divested from emerging markets such as ours in order to cushion the effects of loss suffered at home. It seemed that local investors also erroneously imposed banks short-term orientations on a long term capital market. The inadequacy of some of the existing regulations particularly, in areas such as margin-trading, was also exposed. At end of the year 2013 (₦13.23 trillion), NSE equity market capitalization surpassed the market cap at the peak of the market in 2008 (₦12.62 trillion). The capitalization of listed equities grew by 47.33% and the NSE Share Index (ASI) gained 49.19%. Currently, the contribution of NSE to Nigeria's Gross Domestic Product (GDP) is low compare to previous years. The regulators of the capital market do not have to be told that Nigeria's capital market

is lagging behind comparable developing nations and that there is need to develop and grow the capital market as it is such an important area of a nation's economic development. It is not surprising therefore that reform are being introduced to the capital market aimed at ensuring that the market capitalization of the NSE grows in leaps and bounds henceforth, with a forecast target of 130% of the country's GDP by 2024. To achieve this target, the SEC has stated that it will be addressing issues impacting on regulations in enforcement regulatory oversight and capacity building within the capital market in general, the introduction of new product and reducing overall costs of transactions among others.

The major concern of this research is to determine to what extent the capital market has aided the development of the private sector whether the capital market has really promoted the development of the private sector and the reasons for the low response of the private sector to the incentives provided by the capital market. Nigerian capital market has undergone a series of reforms all with the hope of creating a stable private sector development. The most recent reform was carried out in order to provide opportunities for greater fund mobilization, improved efficiency in resource, allocation and provision of relevant information for appraisal (Osuka, Chigbu, & Lucky, 2024). It is expected as a result of the reform of the market can provide variety of financial instrument capable of enabling economic agents to pool, price and exchange risk. In spite of these roles that the reform is expected to play, there is however a great concern on the Nigerian capital market in relation to private sector development which when viewed from the nature of activities taking place in the market appeared superficial. This may probably be attributed to lack of providing enabling framework that sustained confidence and investor protection and also thorough evaluation of factors that are of significance in determining capital market performance, another issue of concern is most of the studies that evaluate capital market are either on data of primary market or secondary market used to infer on the overall capital market performance but not on the combination of the two markets data in aggregate. This informs the need to evaluate the market on aggregate data basis in order to ascertain how influential it is on private sector investment in Nigeria.

## LITERATURE REVIEW

### Capital Market

Capital market is an integral part of the financial system that provides an efficient delivery mechanism for mobilization and allocation, management and distribution of long term funds for investment project (Alile & Anao, 2000; Osuka, Chigbu, & Lucky, 2024). Sule and Momoh (2009) noted that the capital market is the medium through which funds are mobilized and channeled efficiently from savers to users of funds. Apart from judicious mobilization of idle savings into productive use, the capital market creates an avenue for foreign investment and the influx of foreign capital for developing projects that will increase the welfare of citizens. A capital market is a market for securities (debtor equity), where business enterprises (companies) and government can raise long term funds (Sullivan & Sheffrin, 2003). It is defined as a market in which money is provided for periods longer than two years, as the raising of short term funds take place in the money market. The capital market includes the stock market such as equity securities and the bond market which is about debt. The financial regulators of the capital market such as Central Bank of Nigeria, Securities and Exchange Commission (SEC) oversee the capital market in their designed jurisdiction to ensure that investors are protected against fraud (Afolabi, 2001).

Thus, the capital market is one in which individuals and institutions trade financial securities. Also, organizations or institutions in the public and private sectors also often sell securities on the capital market in order to raise funds. Ekezie (2002) noted that capital market is the market for dealings in terms of lending and borrowing in long term loanable funds. Mbat (2001) describes it as a forum through which long term funds are made available by the surplus economic units to the deficit economic units. It must, however, be noted that although all the surplus economic units have access to the capital market, not all the deficit units have the same easy access to it. The restriction on the part of the borrowers is meant to enforce the security of the funds provided by the lenders. In order to ensure that lenders are not subjected to undue risks, borrowers in the capital market need to satisfy certain basic requirements such as the capital base of the organization, financial worthiness and a host of others. Gugler, Muler and Yurtoglu

(2003) argued that the strength of a country's capital market determines the degree of a firm's investment performance regardless of how closely manager' and owners' match. The capital market offers access to a variety of financial instruments that enable economic agents to pool, price and exchange risks. Through assets with attractive yields, liquidity and risk characteristics, it encourages savings in financial form. This is very essential for government and other institutions in need of long term funds and for suppliers of long term funds (Nwanko, 1996). Based on its importance in accelerating economic growth and development, the government of most nations tends to have keen interest in the performance of its capital market. The concern is for sustained confidence in the market and for a strong investor protection arrangement. Therefore, capital market is the market which deals in long term funds. In other words, it is a network of financial institutions and infrastructure that interact to mobilize and allocate long term funds within the economy. The market affords business firms and the government the opportunity to sell stocks and bonds and to raise long term funds from the savings of other economic agents. The sourcing of long term finances through the capital market is essential for self-sustained economic growth which is consistent with rapid economic growth. An active capital market aids the mobilization of savings for economic growth and development.

### **Capital Market Variables**

#### **Market Capitalization**

Market capitalization represents the aggregate value of stock size (Adewoyin, 2004; Lucky, & Onyinyechi, 2019). Market capitalization is the measurement of the size of businesses and corporations which are equal to the market share price times the number of shares in this case shares that have been authorized, issued and purchased by investors of a publicly traded company (Al-faki, 2006). Market capitalization is also calculated by multiplying the shares of the company by the price per share. The investment community uses the figure to determine a company's size or worth, as opposed to sales or total assets figure.

#### **New Issues**

New issues refer to when a company which tries to raise funds by issuing additional shares or initial public offering to the general public to subscribe for their shares (Anyanwu, 1996). New issues, usually refer to a security that has been registered by the stock exchange, issued and is being sold at a market to the public for the first time, new issues are sometimes referred to newly issued stocks, although initial public offerings are the most commonly known new issues (Afolabi, 1995). Therefore, new issues are avenues by which companies try to raise additional funds in order to carry on with their operation rather than resorting to the bank for loans or to borrow. However, new issues are perceived as securities or shares that are newly floated in the market for subscription by both actual and potential subscribers.

#### **Volume of Transaction**

Volume of transaction has to do with the number of shares or contracts traded in a security or in an entire market during a specific period. It is simply the total amount of shares that change hands between buyer and seller (Mbat, 2002). Volume of transaction is the number of shares traded in a country's stock market or in an entire market over a specific period (Adebiyi, 2005). According to Ekezie (2004), volume of transaction is an important indicator in technical analysis as it is used to measure the worth of a market moves. If the market move significantly up or down, the perceived strength of that move depends on the volume of trading in that period of time.

#### **Private Sector Development**

Many scholars have written widely on private sector and its potency to generate employment, significance and relevance of this sector in the development of any given economy. The experience of developed economies in relation to private sector buttresses the fact that the importance of private sector cannot be over emphasized especially among the developing countries (Hussain, 2013). In order to highlights its significance in relation to the growth and development of a given economy, entrepreneurship has been variously referred to as a source of employment generation. This is because private sector activities have been found to be capable of making positive impact on the economy of a nation and the quality of life of

the people (Akintoye, 2003). World over, the concept of the private sector has been applied to analyze the employment situation and policy option in most developing countries of which Nigeria is not an exception. A large part of the economically active population of these countries finds an income generating source in economic activities outside the formal or modern sector of the economy. With the restructuring and rationalization of the public sector and the deregulation of the labour market in the private sector, the private sector phenomena have also assumed significant proportions in many developed countries (Ilo, 2012). Generally speaking, the contributions of the private sector to the development of the Nigerian economy cannot be over emphasized in terms of employment generation, capital savings and mobilization, efficiently, strong linkages with other sectors, utilization of local technology training ground for entrepreneurs and self-reliance since the beginning of 1980's, the economic position of Nigeria has worsened seriously.

The per capita income fall considerably and wage employment has declined (NISER report, 2013). Private sector constitutes a significant segment of the Nigerian economy. The sector thereby contributes to the Gross Domestic product (GDP) and employment and contributes significantly to economy development of Nigeria in general (Osoba, 2011). The private sector refers to all economic institutions business firms, foundations and cooperatives, etc., that are not owned by the government. The private sector enterprises are often described by other names such as capitalism, free enterprises system, the voluntary exchange economy, the market system, and the profit system (Ademu, 2013). In Nigeria, the private sector is said to include any self-employed person or any employer of labour who does not belong to the government or public sector (Hussan & Nadel, 2012). Put differently anyone who is an employer or self-employed and who does not belong to the government or public sector is believed to be operating in the private sector (Sanda, Dogon & Abdulllah, 2013).

#### **Profitability**

Profitability is the ability of a company or an individual to earn profit from its business activities and make adequate returns to the investors, the higher the profit ratio per Naira sales made the better (Nwude, 2004). Notwithstanding, there are many reasons for investing one's fund, the principal reason why investors invest their hard earned funds to work is so that they can earn a satisfactory return and also the security of their investment (Chadwick & Kirkby, 1995). The term profitability and return are taken to mean the same thing, and is seen as referring to the relationship between the profit and the value of the net assets/capital used to generate that profit. The measurement of profit is probably the most important function of financial accounting. Profit represents the difference between revenues and expenses. The profit and loss account reports for a specific period of time, the items that comprise the total revenue and expenses and the resulting net profit or profit for the accounting period (Glantier & Underdown, 2001). ICAN (2009), explains that profitability maximization is a better financial objective than profit maximization as it takes into account the profits and the assets utilized in generating such profits. Measures of profitability include Return on investment (ROI). Return on capital employed (ROCE), or Return on Equity (ROE) and earnings per share (6ps).

#### **Market Share**

Market share refers to the percentage of sales a company has in a specific market within a specific time period. Higher market share translates into higher profits. Gaining or building market share is an offensive or attack strategy to improve the company's standing in the market (Sarkissian, 2010). Market share is a measure of the consumers' preference for a product over other similar products. A higher market share usually means greater sales, lesser effort to sell more and a strong barrier to entry for other competitors. A higher market share also means that if the market expands the leader gains more than the others. By the same token, a market leader - as defined by its market share - also has to expand the market, for its own growth (Schnaars, 1998). There are many different ways to increase market share; companies usually use a combination of strategies. Sometimes, something as basic as increasing advertising can have huge effects. Breaking products into groups and targeting them at specific demographics can also increase this percentage. Another strategy is improving the product or service itself, which can attract customers from competitors, though this can be difficult, so many companies try

to grow along with a growing market rather than trying to take business from the competition (Sliden, 2014). Market share is a key indicator of market competitiveness; how well a firm is doing against its competitors. This metric, supplemented by changes in sales revenue, helps managers evaluate both primary and selective demand in their market. It enables them to judge not only total market growth or decline but also trends in customers' selections among competitors. Generally, sales growth resulting from primary demand (total market growth) is less costly and more profitable than that achieved by capturing share from competitors. Conversely, losses in market share can signal serious long-term problems that require strategic adjustments. Firms with market shares below a certain level may not be viable. Similarly, within a firm's product line, market share trends for individual products are considered early indicators of future opportunities or problems (Armstrong & Greene, 2007).

The structure-conduct-performance model posits a positive relationship between industry concentration and profitability. Evidence also suggests that the relationship between market share and profitability is robust across different definitions of market share, different sampling frames, and controls for accounting method variation. The quality explanation; in markets beset by uncertainty and imperfect information about product performance, the high market share of a brand acts as a signal of superior quality to consumers. In such markets, consumers are likely to have greater confidence in high market share brands. This enables high market share brands to command a price premium over lower market share brands and thereby enhance their profitability. The market power explanation; Businesses with a high market share, by exercising their market power-the ability to command a price premium, lower costs by negotiating for more favorable terms (than their competitors are able to) with vendors and marketing intermediaries, and obtaining favorable shelf placements from retailers enhance their profitability. The efficiency explanation; The scale and experience effects associated with market share lead to lower costs and thereby enable a business with a high market share to earn higher profits than its competitors with a low market share. The third-factor explanation; a set of third set of factors (unobservable such as luck, uncertainty, or managerial insight) may play a crucial role in helping a business achieve a high market share as well as superior performance (Satish & Varadarajan, 1999).

#### **Efficient-Market Hypothesis Theory**

In finance, the efficient-market hypothesis (EMH) asserts that financial markets are "informationally efficient". That is, one cannot consistently achieve returns in excess of average market returns on a risk-adjusted basis, given the information publicly available at the time the investment is made. There are three major versions of the hypothesis: "weak", "semi-strong", and "strong". Weak EMH claims that prices on traded assets (*e.g.*, stocks, bonds, or property) already reflect all past publicly available information. Semistrong EMH claims both that prices reflect all publicly available information and that prices instantly change to reflect new public information. Strong EMH additionally claims that prices instantly reflect even hidden or "insider" information. There is evidence for and against the weak and semi-strong EMHs, while there is powerful evidence against strong EMH (Burton, 1996).

Beyond the normal utility maximizing agents, the efficient-market hypothesis requires that agents have a rational expectation; that on average the population is correct (even if no one person is) and whenever new relevant information appears, the agents update their expectations appropriately. Note that it is not required that the agents be rational. EMH allows that when faced with new information, some investors may overreact and some may underreact. All that is required by the EMH is that investors' reactions be random and follow a normal distribution pattern so that the net effect on market prices cannot be reliably exploited to make an abnormal profit, especially when considering transaction costs (including commissions and spreads). Thus, any one person can be wrong about the market-indeed, everyone can be-but the market as a whole is always right. There are three common forms in which the efficient-market hypothesis is commonly stated - weak-form efficiency, semi-strong-form efficiency and strong-form efficiency, each of which has different implications for how markets work (Burton, 1996). In weak-form efficiency, future prices cannot be predicted by analyzing prices from the past. Excess returns cannot be earned in the long run by using investment strategies based on historical share prices or other historical data. Technical analysis techniques will not be able to consistently produce excess returns, though some

forms of fundamental analysis may still provide excess returns. Share prices exhibit no serial dependencies, meaning that there are no "patterns" to asset prices. This implies that future price movements are determined entirely by information not contained in the price series. Hence, prices must follow a random walk. This 'soft' EMH does not require that prices remain at or near equilibrium, but only that market participants cannot be able to systematically profit from market 'inefficiencies'.

### **Theory of Capital and Investment**

Irving Fisher's theory of capital and investment was introduced in his *Nature of Capital and Income* (1906) and *Rate of Interest* (1907), although it has its clearest and most famous exposition in his *Theory of Interest* (1930). Of concern is what he called his "second approximation to the theory of interest" (Fisher, 1930: Chs.6-8), which sets the investment decision of the firm as an inter-temporal problem. In his theory, Fisher assumed (note carefully) that all capital was circulating capital. In other words, all capital is used up in the production process, thus a "stock" of capital  $K$  did not exist. Rather, all "capital" is, in fact, investment. Friedrich Hayek (1941) would later take him to task on this assumption - in particular, questioning how Fisher could reconcile his theory of investment with the Clarkian theory of production which underlies the factor market equilibrium.

The second part of the separation theorem effectively claims that the firm's financing needs are independent of the production decision. To see why more clearly, we can restate this in terms of the Neoclassical theory of "real" loanable funds set out by Fisher (1930). The demand for "loanable funds" equals desired investment plus desired borrowing of borrowers whereas the supply of "loanable funds" equals desired savings minus desired investment of savers. Note the condition that for total investment to be equal to total savings, then the demand for loanable funds must equal the supply for loanable funds and this is only possible if the rate of interest is appropriately defined. If the interest rate was such that the demand for loanable funds was not equal to the supply of it, then we would also not have investment equal to savings. Thus, in Fisher's "real" theory of loanable funds, the rate of interest that equilibrates supply and demand for loanable funds will also equilibrate investment and savings.

### **Market Microstructure Theory**

Market microstructure is a branch of finance concerned with the details of how exchange occurs in markets. While the theory of market microstructure applies to the exchange of real or financial assets, more evidence is available on the microstructure of financial markets due to the availability of transactions data from them. The major thrust of market microstructure research examines the ways in which the working processes of a market affects determinants of transaction costs, prices, quotes, volume, and trading behaviour. O'Hara (1995) defines market microstructure as the study of the process and outcomes of exchanging assets under a specific set of rules. While much of economics abstracts from the mechanics of trading, microstructure theory focuses on how specific trading mechanisms affect the price formation process. Microstructure deals with issues of market structure and design, price formation and price discovery, transaction and timing cost, information and disclosure, and market maker and investor behavior. Market structure and design focuses on the relationship between price determination and trading rules. In some markets, for instance, assets are traded through dealers who keep an inventory (e.g., new cars), while other markets are dominated by brokers who act as intermediaries (e.g. housing). One of the important questions in microstructure research is how market structure affects trading costs and whether one structure is more efficient than another. Price formation and discovery focuses on the process by which the price for an asset is determined. For example, in some markets prices are formed through an auction process, in other markets prices are negotiated (e.g., new cars) or simply posted (e.g. local supermarket) and buyers can choose to buy or not. Transaction cost and timing cost is a factor that focuses on transaction cost and timing cost and the impact of transaction cost on investment returns and execution methods. Transaction costs include order processing costs, adverse selection costs, inventory holding costs, and monopoly power. Information and disclosure focuses on the market information and transparency and the impact of the information on the behavior of the market participants (O'Hara, 1995).

In the financial literature on endogenous growth, the relationship between capital markets and private sector development has received much attention (King and Levine, 1993; Levine, 1997; Rajan and Zingales, 1998; Filler, Hanousek, and Campos, 1999; Arestis, Demetriades, and Luintel, 2001; Calderon and Liu, 2002, Carlin and Mayer, 2003). In this context, King and Levine (1993) state that the level of financial intermediation is a good predictor for economic growth rate, capital accumulation and productivity. In the same context, Carlin and Mayer (2003) concluded that there is a strong relationship between the structure of countries' financial system and economic growth. Garretsen, Lensink and Sterken (2004) found out a causal relationship between economic growth and financial markets development: a 1% improvement of economic growth determines a 0.4% rise of market capitalization/GDP ratio. Yet, according to their results, market capitalization/GDP ratio does not represent a significant determinant of the economic growth. Beck, Lundberg and Majnoni (2006), also, found a positive correlation between capital market development (measured by a dummy variable computed to reflect if the market capitalization exceeds 13.5% of GDP) and economic growth. Bose (2005) offers a theoretical financial model that explains the positive correlation between stock market development and economic growth; the model is based on the hypothesis that for levels of GDP per capita higher than a certain threshold the information costs become lower than bankruptcy costs, determining the development of capital markets. Hence, it is explained why stock markets appeared late after banks. Pardy (1992) also argues that a company that raises funds from the public must be required to disclose sufficient information to allow an educated investor to make a reasoned investment decision so that the aggregate of investor's decisions may be a good assessment of a company's worth. This requires an effective legal infrastructure to specify and enforce disclosure standards for all companies issuing securities to the public. Those companies that have securities listed for secondary trading on a market such as a stock exchange should be subjected to additional disclosure requirements imposed as listing rules.

Demirguc-Kunt and Huizinga's (1992) study has implications for the design of tax policy related to foreign portfolio investment in developing countries. They indicate that the existence of foreign tax credits for dividend taxes paid suggests that a country should tax capital gains lightly in comparison with repatriated dividends. Lyon (1992) finds that differing tax treatment of equity and debt can create divergent costs in the use of retained earnings, new share issues and debt finance. In the literature, another factor that affects the development of the capital market is information disclosure or transparency of transaction. Versluysen (1988) indicates that in markets for publicly offered securities, investor access to information pertaining to their prospective investments is more limited than that of professional intermediaries. Investors can therefore be protected by the compulsory disclosure of financial data and other relevant information relating to the issues of securities. Chuppe and Atkin (1992) assert that information asymmetries abound in financial markets. The managers of a firm know more about that firm's market prospects and Investment opportunities than do outsiders. Financial market professionals often have access to information that is not widely available. In an unregulated market, the possibility exists that unsuspecting investors will be harmed by those with access to information not available to the public at large. This is important for the economy because lack of public confidence in securities markets would cause the supply of funds to the markets to dry up, thus depriving the economy of the benefits of a functioning market. The authors further observe that these information asymmetries are the basic justifications for a large number of regulations. Disclosure requirements for public companies must ensure that financial information is available for investors in a way that facilitates inter-company comparisons. It must be noted, however, that disclosure is only effective if there are good accounting standards in place, standards that allow investors to assess the financial health of enterprises. A study by Cheung and Krinsky (1994) confirmed underpricing by investment bankers in an environment of information asymmetry.

### **Empirical Review**

Osinubi and Amaghionyeodiwe (2003) examined the relationship between the Nigerian stock market and private sector development during the period 1980- 2000. Unfortunately, their results did not support the claim that stock market development promotes private sector development. Adam and Sanni (2005) examined the role of stock market in Nigeria's private sector development using Granger-Causality test and regression analysis. The study discovered a one-way causality between GDP growth and market capitalization and a two-way causality between GDP growth and market turnover. They also observed a positive and significant relationship between GDP growth turnover ratios. The study advised that government should encourage the development of the capital market since it has a positive relationship with private sector development.

Obamiro (2005) investigated the role of the Nigerian stock market in the light of economic growth. The author reported a significant positive effect of stock market on private sector development. He suggested that government should create more enabling environment so as to increase the efficiency of the stock market, and to attain higher private sector development.

Ewah, et al (2009) appraised the impact of the Nigeria capital market efficiency on the private sector development of the nation using time series data from 1961 to 2004. They found that the capital market in Nigeria has potential of growth inducing but it has not contribute meaningfully to the private sector development of Nigeria because of low market capitalization, illiquidity, misappropriation of funds among others. Ezeoha, et al (2009) investigated the nature of the relationship that exists between stock market development and the level of investment (domestic private investment and foreign private investment) flows in Nigeria. The study discovered that stock market development promotes domestic private investment flows, thus suggesting the enhancement of the economy's production capacity as well as promotion of the growth of national output. However, the results show that stock development has not been able to encourage the flow of foreign private investment in Nigeria. Afees and Kazeem (2010) critically and empirically examined the causal linkage between stock market and private sector development in Nigeria between 1970 and 2004. The indicator of the stock market development used are market capitalization ratio, total value traded ratio and turnover ratio while the growth rate of gross domestic product is used as proxy for private sector development, using the Granger causality (GC) test, the empirical evidence obtained from the estimation process suggests a bidirectional causality between turnover ratio and economic growth, a uni-directional relationship from market capitalization to private sector development and no causal linkage between total value traded. The result of the causality test is sensitive to the choice of variable used as proxy for stock (capital) market. Overall the result of the G.C test suggested that capital market drive private sector development. Demetriades, et al (2001) utilized time series data from five developed countries, to examine the relationship between stock market and private sector development, controlling for other effect of the banking system and stock market volatility. Their result supports the view that, although banks and stock market may promote economic growth, the effect of bank is more. They suggested that the contribution of stock market to private sector development may have been exaggerated by studies that uses cross country regressions.

Mohtadi and Agarwal (2004) examined the capital market and private sector development in developing countries using a panel data approach that covers 21 emerging markets over 21 years (1977 - 1997), they found that turnover ratio is an important and statistically insignificant determinant of investment by firms and that these investment in turn are significant determinant of aggregate growth. Foreign direct investment is also found to have a strong positive influence on aggregate growth. The result of their study indicates that both turnover ratio and market capitalization are important variables as determinants of private sector development. Nieuwerburgh, et al (2005) investigated the long term relationship between capital (stock) market development and private sector development in Belgium. Their result shows that the market causes private sector development in Belgium. Mishra, et al (2010) examined the impact of capital market efficiency on private sector development of India using the time series data on market capitalization, total market turnover and stock price index over the period spanning from the first quarter of 1991 to the first quarter of 2010. Their study reveals that there is a linkage between capital market



efficiency and private sector development in India. This linkage is established through high rate of market capitalization and total market turnover. The large size of capital market as measured by greater market capitalization is positively correlated with the ability to mobilize capital and diversify risk on an economy wide basis. The increasing trend of market capitalization in India would certainly bring capital market efficiency and thereby contribute to the private sector development of the country.

Beckaert, Harvey and Lundblad (2005) analyzed financial liberalization as a special case of capital market development and determined that equity market liberalizations, on average, led to a 1% increase in annual real private sector development. Studying the link between domestic stock market development and internationalization, Claessens, Klingebiel and Schmukler (2006) using a panel data technique concluded that domestic stock market development as well as stock market internationalization are positively influenced by the log of GDP per capita, the stock market liberalization, the capital account liberalization and the country growth opportunities and negatively influenced by the government deficit/GDP ratio. Minier (2003) analyzed the influence of the stock market dimension on economic development by regression tree techniques; he found evidence that the positive influence of stock market development on economic growth held only for developed stock markets in terms of turnover, in the case of underdeveloped stock markets the influence is negative. Ergungor (2006) analyzed the impact of financial structure on the economic growth on the period 1980-1995; he concluded that in countries with inflexible judicial systems the stronger impact on private sector development is generated by the development of the bank-system, whereas in countries with greater flexibility of judicial systems the development of the capital market had a stronger influence. Studies on the relationship between capital market development and private sector development in different countries were performed. Nieuwerburgh, Buelens and Cuyvers (2006) analysed the long-run relationship between stock market development (measured by market capitalization and number of listed shares) and private sector development (measured as a logarithmic difference of GDP per capita) in Belgium. They performed Granger causality tests and emphasized that stock market development determined economic growth in Belgium especially in the period 1873-1935, but also on the entire analyzed period (1800-2000) with variations in time dues to institutional changes affecting the stock exchange. Hondroyiannis, Lolos and Papapetrou (2005) studied the case of Greece (1986-1999); they found out that the relationship between economic growth and capital market development is bi-directional. Studying the effect of different components of financial systems on economic growth in Taiwan, Korea and Japan, Liu and Hsu (2006) emphasized the positive effect of stock market development (measured by market capitalization as percentage of GDP, turnover as percentage in GDP and stock return) on economic growth. Bolbol, Fatheldin, and Omran (2005) analyzed the effect of financial markets (measured by the ratio of market capitalization on GDP and the turnover ratio) on total factor productivity and growth (the per capita GDP growth rate) in Egypt (1974-2002); they demonstrated that capital market development had a positive influence on factor productivity and growth. Ben Naceur and Ghazouani (2007), studying the influence of stock markets and bank system development on economic growth on a sample of 11 Arab countries, concluded that financial development could negatively influence the economic growth in countries with underdeveloped financial systems; they stressed the role of building a sound financial system.

In the context of European Union enlargement, an analysis of the relationship between capital markets development and economic growth could explain why different countries reach different economic growth rates, and could find solutions in order to stimulate the process of economic growth through capital market using public policy instruments. Related to this issue, even there are many studies regarding developed countries, approaches on East- European ex-communist countries' economies are very few relatively to developed countries cases. Romanian capital market had developed slowly starting from 1995. Moreover, several years after 1989 Romania had negative economic growth rates (the real rate of GDP growth). Only since 2000 Romania had positive economic growth rates accompanied by the development of the financial system; these particular aspects could alter the relationship between economic growth and capital market development, and more specifically the conclusion on whether capital market development is a good predictor for economic growth rates. Kogi (2003) did a study on

the future of collective investment schemes in the Kenyan capital market. He found that the Kenyan capital markets will continue to offer an array of investment products in the form of shares, bonds and unit trusts. The type of products chosen by the collective investment schemes to commit their capital will largely depend on their financial goals, time frame, and amount of capital available. Otieno (2003) did a study on the contribution of privatization to capital market development: The case of companies privatized at the NSE. Otieno found out that privatization broadens and deepens the capital market resulting from increased listings and market size, improved liquidity and regulatory infrastructure, improved awareness and enlarged investor base. Privatization has also provided opportunity for risk diversification, enhanced professionalism and increased government attention. Ndegwa (2008) studied the factors limiting the integration of capital markets in East African countries. He found that high interest rates on bank deposits associated with weaknesses in banking systems have contributed to unsustainable capital inflows. A key challenge for policymakers in the regional market countries was found to be reducing their vulnerability to volatile capital flows and to ensure that weaknesses in the financial sector do not limit the ability of authorities to pursue macroeconomic policies needed to safeguard monetary stability.

### **Knowledge Gap**

The capital market in Nigeria has the potential to induce growth, but it has not contributed meaningfully to private sector development in Nigeria because of low market capitalization, low adsorption capacity, illiquidity, misappropriation of funds among others. On the other hand, a vibrant and well developed stock market would attract foreign investors and enhance the attainment of higher economic growth.

### **METHODOLOGY**

Descriptive research design has been adopted for the purpose of this study. According to Best and Kahn (2003) descriptive research is the type of enquiring that deals with the collection and analysis of data for the purpose of describing and interpreting existing conditions and also to make discovery and explanation of past events. Descriptive research is utilized because it enables exploring relationships between two or more variables. Also, it is appropriate for testing the hypotheses of the study and help to answer the research questions concerning the capital market and private sector development which are crucial concern of this study. The population of the study constitutes all the private companies quoted on the Nigerian Stock Exchange because the study has to do with the capital market and private sectors development in Nigeria. The data used in this study has been collected from secondary sources. The instrument utilized for the collection of secondary data is documentation. Documentary data has been collected via the Nigeria Stock Exchange bulletin (NSE), Security and Exchange Commission (SEC) bulletin and Central Bank of Nigeria (CBN) statistical bulletin. The study utilizes the secondary source because it provides a basis for purposeful research work and also gives a direction for the research work.

### **Technique of Data Analysis**

The multiple regression analysis was used to determine whether the capital market indices (market capitalization, total new issues, volume of transaction and total listed equities) have impacted significantly on private sector development in Nigeria.

### **Model Specification**

The model specified for the purpose of testing the hypotheses of the study is presented below:

$$y = a + bx + e$$

$$PAT = a_0 + a_1t + MKTC_t + a_2t VT_t + a_3tND_t + e_t$$

Where:

- PAT = Profit after tax proxy for private sector development
- a<sub>0</sub> = Regression constant
- a<sub>1</sub>- a<sub>3</sub> = Coefficient of independent variables
- MKTC = Market capitalization
- VT = Volume of transaction

ND = Number of deals  
 e = Stochastic Error term  
 t = Time series

**Table 1 Variable Measurement**

S/No	Variable	Symbol	Measurement of variable
1.	Profit after tax	PAT	<u>EBIT -TAX</u>
2.	Market capitalization	MKTC	Number of shares of the company X market share price
3.	Volume of transaction	VT	Existing number value of transaction
4.	Number of deals	ND	Total number of deals.

**Source:** Authors Research Desk, 2024

The definitions of the variables that are used in the model are based on the regression model development in the study. The three variables MCAP, TNI and VLT represent capital market, while the variable ROI represents private sector development.

**Decision Criterion**

The decision to test the hypothesis of the study is as follows: If the p-value of the t – coefficient is less than 1% (0.01) or 5% (0.05%), the null hypothesis is rejected and otherwise we fail to reject.

**ANALYSIS AND DISCUSSION OF FINDINGS**

**Table 2: effect of capital market on the development of private sector in Nigeria**

Variable	Pooled Effect			Fixed effect			Random effect		
	$\beta$ coefficient	T. stat	P. value	$\beta$ coefficient	T. stat	P. value	$\beta$ coefficient	T. stat	P. value
MKTC	-0.008498	-0.970996	0.3343	-0.808045	-4.778931	0.0000	-0.008498	6.479219	0.0000
VT	-0.007916	-0.757491	0.4508	0.510052	3.730660	0.0004	-0.007916	-0.225678	0.6407
ND	0.013944	1.266152	0.2089	0.012277	0.913417	0.3641	0.013944	-0.660563	0.2195
C	0.497493	5.124498	0.0000	0.533211	3.742397	0.0004	0.497493	0.779834	0.2674
R <sup>2</sup>	0.024893			0.744183			0.008498		
AdjR <sup>2</sup>	0.009123			0.657885			0.024893		
F-statistic	0.731802			6.713538			0.009123		
F- Prob	0.535825			0.000051			0.731802		
D W	2.109933			2.358110			0.535825		
<b>Redundant Fixed Effects Tests: Testing the Significance of the Model</b>									
Effects Test		Statistic	d.f.			Prob.			
Cross-section F		34.742526	(19,175)			0.0009			
Cross-section Chi-square		15.506456	19			0.0099			
Hausman Test									
Cross-section random		36.458795	8			0.0000			

Source: extract from E-view 9.0

From the Hausman’s test as shown in the table above, we accept the fixed effect model and reject the random effect model as the probability coefficient of 0.0000 is less than the critical value of 0.05. The pooled effect model found that the independent variables can explain 2 percent variation on profitability of the selected private sector firms. It is evidence from the F-statistics that the model is not significant as the probability coefficient is less than 0.05 critical values. The Durbin Watson statistics of 2.109933 is less than 2.50 but greater than 2.00; this justifies the absence of serial autocorrelation. The beta coefficient of the independent variables on the dependent variable found that market capitalization and volume of transaction have negative and significant effect on profitability of the selected firms while total number of new issues has positive but insignificant effect on the dependent variable.

The effect of the independent variables on the dependent variables based on fixed effect model found that capital market proxy by market capitalization, volume of transactions and total number of new issues can explain 74 percent variables on the profitability of the private sector firms, the validity of the model was tested using the F-statistics and the F-probability which found that the model is significant, the Durbin

Watson statistics of 2.358110 is less than 2.50 but greater than 2.00, this justifies the absence of serial autocorrelation. The beta coefficient found that market capitalization and volume of transaction have positive and significant effect on profitability of quoted firms while total number of new issues positive but insignificant effect on profit after tax of the private firms.

The random effect model found that the independent variables can explain 0.8 percent variation and dividend payout rate of the deposit money banks. It is evidence from the F-statistics and the F-probability that the model is not significant while the Durbin Watson statistics of 0.535825 is less than 1.00 but greater than 0.5 this justify the absence of serial autocorrelation. The beta coefficient of the variables found that market capitalization and volume of transaction have negative but insignificant effect on the dependent variable while total number of new issues has positive and insignificant effect on the profitability of the 10 selected private firms in Nigeria.

## **DISCUSSION OF FINDINGS**

Mobilization of resources for national development has long been the central focus of development economists. As a result of this, the centrality of savings and investment in economic growth has been given considerable attention in the literature (Demirguc-Kunt & Levine, 2003). For sustainable growth and development, funds must be effectively mobilized and allocated to enable businesses and the economy harness their human, material, and management resources for optimal output. This means that the capital market is the major determinant of corporate private sector development.

From the first research objective, question and hypothesis, which was stated to examine the relationship between market capitalization and the profitability of quoted private sector firms, the study found that market capitalization, have negative and significant effect on the profitability of the quoted private sector firms. The negative coefficient of the variable as shown in table I indicate that with 1 percent increase on market capitalization will lead to 0.8 percent decrease on the profitability of the quoted selected private sector firms. This finding is contrary to our a-priori expectation and contradicts the objectives of the reforms in Nigeria capital market. The negative effect of market capitalization on the profitability of the firms can be traced to ill performance of the capital market.

From the second research objective, question and hypothesis, which was stated to examine the relationship between volume of transaction and the profitability of quoted private sector firms, the study found that volume of transaction, have positive and significant effect on the profitability of the quoted private sector firms. The negative coefficient of the variable as shown in table I indicate that with 1 percent increase on market capitalization will lead to 0.5 percent increase on the profitability of the quoted selected private sector firms. This finding is confirm a-priori expectation and contradicts the objectives of the reforms in Nigeria capital market. The positive effect of volume of transaction on the profitability of the firms can be traced to reforms in the capital market.

From the third research objective, question and hypothesis, which was stated to examine the relationship between total number of new issues and the profitability of quoted private sector firms, the study found that total number of new issues, have positive and insignificant effect on the profitability of the quoted private sector firms. The negative coefficient of the variable as shown in table I indicate that with 1 percent increase on market capitalization will lead to 0.02 percent increase on the profitability of the quoted selected private sector firms. This finding is confirms a-priori expectation and contradicts the objectives of the reforms in Nigeria capital market. The positive effect of volume of transaction on the profitability of the firms can be traced to reforms in the capital market.

## **CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

This study has developed a prudent multiple regression model for the purpose of explaining and analyzing capital market and private sector development in Nigeria. Using multiple regression analysis to model development, the study estimates the relationship between three explanatory variables, market capitalization, volume of transaction, and total number of new issues. The study hypothesized a

significant impact between the three explanatory variables and private sector development and the findings of the research are based on cross sectional data collected for the period 2014-2023 from the Nigeria Stock Exchange. The result of the study reveals that the three predictor variables, market capitalizations, volume of transaction and total number of new issues have an aggregate significant impact at 1 percent level of significance, and listed equities is at 5 percent level of significance on the private sector development proxy by profit after tax of the firms. The foregoing provided the justification for the rejection of all the null hypotheses of the study. The study also reveals that market capitalization, has the highest on the private sector development following by volume of transaction and total number of new issues. Based on the findings of the research, the study concludes as follows: first, the study has provided evidence on the four independent variables; market capitalization, volume of transaction and total number of new issues in explaining and predicting private sector profitability. The study concluded that the three variables have played a significant role in influencing private sector development.

Secondly, the study also establishes significant negative relationship between market capitalization and private sector development. It is therefore concluded that as market capitalization are raised and floated in the market, this in turn decreases on the profitability of the selected private sector firms. Thirdly, the study documents a significant positive relationship between volume of transaction and profitability of the selected private firms. This concludes that the volume of transaction is an important factor in determining the magnitude of profitability of quoted private sector firms.

### **Recommendations**

Based on the findings and conclusions of the study, the following recommendations are hereby presented.

- (1) There is need for improvement in the declining market capitalization by encouraging more foreign investors to participate in the market, maintain state of the art technology that will ensure a free flow of information in the market to attract more investors as well as increase new issues which will automatically increase the quantum of market capitalization.
- (2) There is also the need to restore confidence in the market by the Securities and Exchange Commission and the Nigerian stock exchange commission through ensuring transparent and fair trading transactions and dealings in the stock exchange.
- (3) Government should remove impediments to market growth in form of legal and regulatory barriers because they are sometimes disincentives to investment.
- (4) As observed, the total listed equities in the NSE are still very low compared to other stock market like those of South Africa and Egypt. Therefore, to increase the number of listed companies there is need to ensure stable macroeconomic environment, to encourage foreign multinational companies or their subsidiaries to be listed on the Nigerian stock exchange and also to improve the trading system in order to increase the ease with which investors can purchase and sell shares.
- (5) Total new issues are very important to the growth of any capital market. Therefore, government should employ appropriate trade policies such as establishing National Association of Securities, dealers that promote the inflow of international capital and foreign investment, so as to enhance the production capacity of the nation. The Government should restore nation. The government should restore the confidence of shareholder due to the declining for tune of the stock market.

### **REFERENCES**

- Adam, J. & Sanni, L. (2008). Stock market development and Nigeria's economic growth. *Journal of Economies and Allied Fields*.
- Beck, T. & Levine, R. (2001). Stock markets, banks and growth. Correlation or causality? Policy research working paper 26to, Washington DC: World Bank.
- Beck, T. & Levine, R. (2004). Stock Markets, Banks and Growth: Panel Evidence. *Journal of Banking & Finance*.
- Bjorton, G. , & Malkiel, A. (1996). Random walk down wall street, w.w.. Norton, 1996.

- Central Bank of Nigeria (CBN). Statistical Bulletins of 2004, 2005, 2006, and 2012. Abuja: Central Bank of Nigeria Publication.
- Demugu, C., Kunt, A. & Levine R. (1993). Stock markets and financial intermediaries: stylized factor. World Bank Conference on Stock markets, corporate finance, and economic growth.
- Ezeoha, A, Ebele, O. & Ndi, O. O. (2009). Stock market development and private sustainable development in Africa.
- Guanger, Clive, W. J. & Morgenstern (2007). Spectral Analysis of New York Stock Market Prices; Kyklos.
- Ikiki, S.M. & Nzomoi, J. N. (2013). An analysis of the effect of stock market development on economic growth in Kenya. *International Journals of Economics and Finance*.
- Kin, E. H. (2000). Stock market openings: Experience of Emerging economies. *Journal of Business*.
- King, R. G. & Levine, R. (1993). Finance, Entrepreneurship and Growth: Theory and Evidence, *Journal of Monetary Economics*.
- Lucky, A. L., & Onyinyechi, G. U. (2019). Dividend policy and value of quoted firms in Nigeria: A test of Miller and Modigliani Irrelevant Hypothesis. *Australian Finance & Banking Review*, 3(2), 16-29.
- MaLIFADI, H. & Agarnal, S. (2004). Stock market development and economic growth: Evidence from developing countries.
- Marco, Pagano (1993). *Financial markets and Growth*. European Economic Review.
- Oluenyi, T. O. & Kimani, D. (2011). Stock market performance and economic growth – empirical evidence from Kenya. *Advances in Management and Applied Economics*. Vol. 1.
- Osamuonyi, I. O. & Lasimu, A. (2013). Stock market and economic growth in Ghana, Kenya and Nigeria *International Journal of Financial Research*.
- Osamuronyi, I. O. (2015). Capital Market importations and Community Economic Development in Nigeria. Being a paper presented at the academy of management in Nigeria, on the 23<sup>rd</sup> of November, at Abuja.
- Osinubi, T. & Amaghionyeodiwe C. (2011). Does stock market promote economic growth in Nigeria?
- Osuka, B. O., Chigbu, S.U. & Lucky, A. L. (2024). External debt and stock market performance in Nigeria. *World Journal of Finance and Investment Research*, 8(1), 172-188.
- Osuka, B. O., Chigbu, S.U. & Lucky, A. L. (2024). Foreign portfolio investment and stock market capitalization in Nigeria. *International Journal of Economics and Financial Management (IJEFM)*, 9(2), 216-237.
- Schmukler, S.L. (2006). Capital market development: whither, Latin America? *National Bureau of economic research*.
- Singh, T. (1997). Capital market liberalization, economic growth and instability world development.
- Standard and poor (2005), Global Stock market fact Book 2005, New York.